

# SEQUENCE LISTING

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<120> HLA-E CHIMERIC MOLECULE

<130> 2520-0132PUS1

<140> US 10/578,139

<141> 2006-05-03

<160> 92

<170> PatentIn version 3.4

<210> 1

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
SP of HLA-E

<400> 1

Met Val Asp Gly Thr Leu Leu Leu Leu Leu Ser Glu Ala Leu Ala Leu  
1 5 10 15

Thr Gln Thr Trp Ala  
20

<210> 2

<211> 90

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a1 domain of HLA-E

<400> 2

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly  
1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg

35

40

45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr  
 50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr  
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
 85 90

&lt;210&gt; 3

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a2 domain of HLA-E

&lt;400&gt; 3

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp  
 1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp  
 20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr  
 35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Ser Asn Asp Ala Ser Glu Ala Glu  
 50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys  
 65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu  
 85 90

&lt;210&gt; 4

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain of HLA-E

<400> 4

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp  
85 90

<210> 5

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain of HLA-E

<400> 5

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val  
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys  
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
50 55 60

<210> 6  
 <211> 63  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 SP of HLA-E

<400> 6  
 atggtagatg gaaccctcct ttctactctc tcggaggccc tggcccttac ccagacctgg 60  
 gcg 63

<210> 7  
 <211> 270  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a1 domain of HLA-E

<400> 7  
 ggctcccact ccttgaagta ttccacact tccgtgtccc ggcccggccg cggggagccc 60  
 cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120  
 gcgagtccga ggatggtgcc gcgggcgccg tggatggagc aggaggggtc agagtattgg 180  
 gaccgggaga cacggagcgc caggacacc gcacagattt tccgagtga tctgcggacg 240  
 ctgcgcggct actacaatca gagcgaggcc 270

<210> 8  
 <211> 276  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a2 domain of HLA-E

<400> 8  
 gggctctaca ccctgcagtg gatgcatggc tgcgagctgg ggcccagacag gcgcttcctc 60  
 cgcggggtatg aacagttcgc ctacgacggc aaggattatc tcacctgaa tgaggacctg 120  
 cgctcctgga ccgcggtgga caggcggtc cagatctccg agcaaaagtc aaatgatgcc 180  
 tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa 240

tacctggaga aggggaagga gacgctgctt cacctg

276

<210> 9  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain of HLA-E

<400> 9  
gagcccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60  
tgctgggccc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag 120  
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag 180  
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240  
catgaggggc tacccgagcc cgtcaccctg agatgg 276

<210> 10  
<211> 192  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain of HLA-E

<400> 10  
aagccggctt cccagcccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60  
ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120  
ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtct 180  
cacagcttgt aa 192

<210> 11  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
SP of HLA-G1

<400> 11

Met Val Val Met Ala Pro Arg Thr Leu Phe Leu Leu Leu Ser Gly Ala  
 1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala  
 20

<210> 12  
 <211> 90  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a1 domain of HLA-G1

<400> 12

Gly Ser His Ser Met Arg Tyr Phe Ser Ala Ala Val Ser Arg Pro Gly  
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ala Met Gly Tyr Val Asp Asp Thr Gln  
 20 25 30

Phe Val Arg Phe Asp Ser Asp Ser Ala Cys Pro Arg Met Glu Pro Arg  
 35 40 45

Ala Pro Trp Val Glu Gln Glu Gly Pro Glu Tyr Trp Glu Glu Glu Thr  
 50 55 60

Arg Asn Thr Lys Ala His Ala Gln Thr Asp Arg Met Asn Leu Gln Thr  
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
 85 90

<210> 13  
 <211> 92  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a2 domain of HLA-G1

<400> 13

Ser Ser His Thr Leu Gln Trp Met Ile Gly Cys Asp Leu Gly Ser Asp  
 1 5 10 15

Gly Arg Leu Leu Arg Gly Tyr Glu Gln Tyr Ala Tyr Asp Gly Lys Asp  
 20 25 30

Tyr Leu Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr  
 35 40 45

Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu  
 50 55 60

Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg  
 65 70 75 80

Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala  
 85 90

<210> 14  
 <211> 92  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a3 domain of HLA-G1

<400> 14

Asp Pro Pro Lys Thr His Val Thr His His Pro Val Phe Asp Tyr Glu  
 1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Ile  
 20 25 30

Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Val Glu Leu  
 35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
 50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
 65 70 75 80

His Glu Gly Leu Pro Glu Pro Leu Met Leu Arg Trp

<210> 15  
 <211> 40  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain of HLA-G1

<400> 15

Lys Gln Ser Ser Leu Pro Thr Ile Pro Ile Met Gly Ile Val Ala Gly  
 1 5 10 15

Leu Val Val Leu Ala Ala Val Val Thr Gly Ala Ala Val Ala Ala Val  
 20 25 30

Leu Trp Arg Lys Lys Ser Ser Asp  
 35 40

<210> 16  
 <211> 72  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 SP of HLA-G1

<400> 16  
 atggtggtca tggcgccccg aaccctcttc ctgctgctct cgggggccct gaccctgacc 60  
 gagacctggg cg 72

<210> 17  
 <211> 270  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 al domain of HLA-G1

<400> 17  
 ggctcccact ccatgaggta tttcagcgcc gccgtgtccc ggcccggccg cggggagccc 60  
 cgcttcatcg ccatgggcta cgtggacgac acgcagttcg tgcggttcga cagcgactcg 120



gcgtgtccga ggatggagcc gcgggcgccg tgggtggagc aggaggggcc agagtattgg 180  
gaagaggaga cacggaacac caaggccac gcacagactg acagaatgaa cctgcagacc 240  
ctgcgcggct actacaacca gagcgaggcc 270

<210> 18  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain of HLA-G1

<400> 18  
agttctcaca ccctccagtg gatgattggc tgcgacctgg ggtccgacgg tcgcctcctc 60  
cgcgggatatg aacagtatgc ctacgatggc aaggattacc tcgccctgaa cgaggacctg 120  
cgctcctgga ccgcagcggg cactgcggct cagatctcca agcgcaagtg tgaggcggcc 180  
aatgtggctg aacaaaggag agcctacctg gagggcacgt gcgtggagtg gctccacaga 240  
tacctggaga acgggaagga gatgctgcag cgcgcg 276

<210> 19  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain of HLA-G1

<400> 19  
gaccccccca agacacacgt gaccaccac cctgtctttg actatgaggc caccctgagg 60  
tgctggggccc tgggcttcta ccctgcggag atcactactga cctggcagcg ggatggggag 120  
gaccagaccc aggacgtgga gctcgtggag accaggcctg caggggatgg aaccttccag 180  
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240  
catgaggggc tgccggagcc cctcatgctg agatgg 276

<210> 20  
<211> 123  
<212> DNA  
<213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain of HLA-G1

<400> 20  
 aagcagtctt ccctgcccac catccccatc atgggtatcg ttgctggcct ggttgctcct 60  
 gcagctgtag tcaactggagc tgcggtcgct gctgtgctgt ggagaaagaa gagctcagat 120  
 tga 123

<210> 21  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Reformed SP

<400> 21  
 Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala  
 1 5 10 15  
 Leu Thr Leu Thr Glu Thr Trp Ala  
 20

<210> 22  
 <211> 90  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a1 domain

<400> 22  
 Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly  
 1 5 10 15  
 Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
 20 25 30  
 Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg  
 35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr  
50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr  
65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
85 90

<210> 23  
<211> 92  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 23

Ser Ser His Thr Leu Gln Trp Met Ile Gly Cys Asp Leu Gly Ser Asp  
1 5 10 15

Gly Arg Leu Leu Arg Gly Tyr Glu Gln Tyr Ala Tyr Asp Gly Lys Asp  
20 25 30

Tyr Leu Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr  
35 40 45

Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu  
50 55 60

Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg  
65 70 75 80

Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala  
85 90

<210> 24  
<211> 92  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 24

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp  
85 90

<210> 25

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain

<400> 25

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val  
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys  
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
50 55 60

<210> 26

<211> 72

<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Reformed SP

<400> 26  
atggcgggtca tggcgccccg aaccctcgtc ctgctactct cgggggccct gaccctgacc 60  
gagacctggg cg 72

<210> 27  
<211> 270  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a1 domain

<400> 27  
ggctcccact ccttgaagta tttccacact tccgtgtccc ggcccggccg cggggagccc 60  
cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120  
gcgagtccga ggatggtgcc gcggggcgccg tggatggagc aggaggggtc agagtattgg 180  
gaccgggaga cacggagcgc cagggacacc gcacagattt tccgagtga tctgcggacg 240  
ctgcgcggct actacaatca gagcgaggcc 270

<210> 28  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 28  
agttctcaca ccctccagtg gatgattggc tgcgacctgg ggtccgacgg tcgcctcctc 60  
cgcggggtatg aacagtatgc ctacgatggc aaggattacc tcgccctgaa cgaggacctg 120  
cgctcctgga ccgcagcgga cactgcggtc cagatctcca agcgcaagtg tgaggcgggc 180  
aatgtggctg aacaaaggag agcctacctg gagggcacgt gcgtggagtg gctccacaga 240  
tacctggaga acgggaagga gatgctgcag cgcgcg 276

<210> 29  
 <211> 276  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a3 domain

<400> 29  
 gagccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60  
 tgctggggccc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag 120  
 ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag 180  
 aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240  
 catgaggggc taccgagcc cgtcaccctg agatgg 276

<210> 30  
 <211> 192  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain

<400> 30  
 aagccggctt cccagcccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60  
 ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120  
 ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgcccaggg gtctgagtct 180  
 cacagcttgt aa 192

<210> 31  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Reformed SP

<400> 31  
 Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala  
 1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala  
20

<210> 32  
<211> 90  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a1 domain

<400> 32

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly  
1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg  
35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr  
50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr  
65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
85 90

<210> 33  
<211> 92  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 33

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp  
1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp  
20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr  
35 40 45

Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu  
50 55 60

Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg  
65 70 75 80

Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala  
85 90

<210> 34

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 34

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp  
85 90



<210> 35  
 <211> 63  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain

<400> 35

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
 1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val  
 20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys  
 35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
 50 55 60

<210> 36  
 <211> 72  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Reformed SP

<400> 36  
 atggcggtca tggcgccccg aaccctcgtc ctgctactct cgggggccct gaccctgacc 60  
 gagacctggg cg 72

<210> 37  
 <211> 270  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 al domain

<400> 37  
 ggctcccact ccttgaagta tttccacact tccgtgtccc ggcccggccg cggggagccc 60

cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120  
gcgagtccga ggatggtgcc gcgggcccgc tggatggagc aggaggggtc agagtattgg 180  
gaccgggaga cacggagcgc cagggacacc gcacagattt tccgagtga tctgcggacg 240  
ctgcgcggct actacaatca gagcgaggcc 270

<210> 38  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 38  
gggtctcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccacag gcgcttcctc 60  
cgcggggatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg 120  
cgctcctgga ccgcggtgga cactgcggct cagatctcca agcgcaagtg tgaggcggcc 180  
aatgtggctg aacaaaggag agcctacctg gagggcacgt gcgtggagtg gctccacaga 240  
tacctggaga acgggaagga gatgctgcag cgcgcg 276

<210> 39  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 39  
gagcccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60  
tgctggggcc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag 120  
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttcag 180  
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240  
catgaggggc taccgagcc cgtcaccctg agatgg 276

<210> 40  
<211> 192  
<212> DNA  
<213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain

<400> 40  
 aagccggctt cccagcccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60  
 ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120  
 ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtct 180  
 cacagcttgt aa 192

<210> 41  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Reformed SP

<400> 41  
 Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala  
 1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala  
 20

<210> 42  
 <211> 90  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 al domain

<400> 42  
 Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly  
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
 20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg

35	40	45
Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr		
50	55	60
Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr		
65	70	75
		80
Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala		
	85	90
<210> 43 <211> 92 <212> PRT <213> Artificial Sequence		
<220> <223> Description of Artificial Sequence: Synthetic chimeric sequence a2 domain		
<400> 43		
Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp		
1	5	10
		15
Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp		
	20	25
		30
Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr		
	35	40
		45
Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Ser Glu Ala Glu		
50	55	60
His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys		
65	70	75
		80
Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu		
	85	90
<210> 44 <211> 92 <212> PRT <213> Artificial Sequence		
<220>		

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 44

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp  
85 90

<210> 45

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain

<400> 45

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val  
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys  
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
50 55 60

<210> 46  
 <211> 72  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Reformed SP

<400> 46  
 atggcgggtca tggcgccccg aaccctcgtc ctgctactct cgggggcccct gaccctgacc 60  
 gagacctggg cg 72

<210> 47  
 <211> 270  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a1 domain

<400> 47  
 ggctcccact ccttgaagta tttccacact tccgtgtccc ggcccggccg cggggagccc 60  
 cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120  
 gcgagtccga ggatggtgcc gcgggcgccg tggatggagc aggaggggtc agagtattgg 180  
 gaccgggaga cacggagcgc cagggacacc gcacagattt tccgagtga tctgcggaag 240  
 ctgcgcggt actacaatca gagcgaggcc 270

<210> 48  
 <211> 276  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a2 domain

<400> 48  
 ggggtctcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccagacag gcgcttcctc 60  
 cgcgggtatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg 120  
 cgctcctgga ccgcggtgga cactgcgggt cagatctcca agcgcaagtg tgaggcgggc 180  
 tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagt gctccacaaa 240

tacctggaga aggggaagga gacgctgctt cacctg 276

<210> 49  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 49  
gagccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60  
tgctgggccc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag 120  
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag 180  
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240  
catgaggggc tacccgagcc cgtcacctg agatgg 276

<210> 50  
<211> 192  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain

<400> 50  
aagccggctt cccagcccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60  
ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120  
ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtct 180  
cacagcttgt aa 192

<210> 51  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
SP of HLA-E

<400> 51

Met Val Asp Gly Thr Leu Leu Leu Leu Leu Ser Glu Ala Leu Ala Leu  
 1 5 10 15

Thr Gln Thr Trp Ala  
 20

<210> 52  
 <211> 90  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a1 domain

<400> 52

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly  
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
 20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg  
 35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr  
 50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr  
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
 85 90

<210> 53  
 <211> 92  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a2 domain

<400> 53



Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp  
 1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp  
 20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr  
 35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Cys Asn Asp Ala Ser Glu Ala Glu  
 50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys  
 65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu  
 85 90

<210> 54

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a3 domain

<400> 54

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
 1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
 20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
 35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
 50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
 65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp

<210> 55  
 <211> 63  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain

<400> 55

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
 1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val  
 20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys  
 35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
 50 55 60

<210> 56  
 <211> 63  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 SP of HLA-E

<400> 56  
 atggtagatg gaaccctcct ttactcctc tcggaggccc tggcccttac ccagacctgg 60  
 gcg 63

<210> 57  
 <211> 270  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 al domain

<400> 57  
ggctcccact ccttgaagta tttccacact tccgtgtccc ggcccggccg cggggagccc 60  
cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120  
gcgagtccga ggatgggtgcc gcgggcgccg tggatggagc aggaggggtc agagtattgg 180  
gaccgggaga cacggagcgc cagggacacc gcacagattt tccgagtga tctgcggacg 240  
ctgcgcggct actacaatca gagcgaggcc 270

<210> 58  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 58  
gggtctcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccagacag gcgcttcctc 60  
cgcggggatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg 120  
cgctcctgga ccgcggtgga cacggcggct cagatctccg agcaaaagtg taatgatgcc 180  
tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa 240  
tacctggaga aggggaagga gacgctgctt cacctg 276

<210> 59  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 59  
gagcccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60  
tgctgggccc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag 120  
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag 180  
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240  
catgaggggc tacccgagcc cgtcaccctg agatgg 276

<210> 60

<211> 192  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain

<400> 60  
 aagccggctt cccagccac catcccatc gtgggcatca ttgctggcct ggttctcctt 60  
 ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120  
 ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccaggg gtctgagtct 180  
 cacagcttgt aa 192

<210> 61  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Reformed SP

<400> 61

Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala  
 1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala  
 20

<210> 62  
 <211> 90  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 al domain

<400> 62

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly  
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
 20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg  
35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr  
50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr  
65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
85 90

<210> 63

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 63

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp  
1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp  
20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr  
35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Cys Asn Asp Ala Ser Glu Ala Glu  
50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys  
65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu  
85 90

<210> 64

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 64

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp  
85 90

<210> 65

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain

<400> 65

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Val  
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys  
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
50 55 60

<210> 66  
<211> 72  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Reformed SP

<400> 66  
atggcgggtca tggcgccccg aaccctcgtc ctgctactct cgggggccct gaccctgacc 60  
gagacctggg cg 72

<210> 67  
<211> 270  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a1 domain

<400> 67  
ggctcccact ccttgaagta tttccacact tccgtgtccc ggcccggccg cggggagccc 60  
cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120  
gcgagtccga ggatggtgcc gcgggcgccg tggatggagc aggaggggtc agagtattgg 180  
gaccgggaga cacggagcgc cagggaacacc gcacagattt tccgagtga tctgcggacg 240  
ctgcgcggct actacaatca gagcgaggcc 270

<210> 68  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 68  
gggtctcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccacag gcgcttcctc 60  
cgcggggtatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg 120

cgctcctgga ccgcggtgga cacggcggct cagatctccg agcaaaagtg taatgatgcc 180  
tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa 240  
tacctggaga aggggaagga gacgctgctt cacctg 276

<210> 69  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 69  
gagccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60  
tgctgggccc tgggcttcta cctgcggag atcacactga cctggcagca ggatggggag 120  
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag 180  
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240  
catgaggggc taccgagcc cgtcaccctg agatgg 276

<210> 70  
<211> 192  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain

<400> 70  
aagccggctt cccagccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60  
ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120  
ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtct 180  
cacagcttgt aa 192

<210> 71  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
SP of HLA-E



<400> 71

Met Val Asp Gly Thr Leu Leu Leu Leu Leu Ser Glu Ala Leu Ala Leu  
1 5 10 15

Thr Gln Thr Trp Ala  
20

<210> 72

<211> 90

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a1 domain

<400> 72

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ala Val Ser Arg Pro Gly  
1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg  
35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr  
50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr  
65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
85 90

<210> 73

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 73

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp  
1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp  
20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr  
35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Cys Asn Asp Ala Ser Glu Ala Glu  
50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys  
65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu  
85 90

<210> 74

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 74

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp  
85 90

<210> 75  
<211> 63  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain

<400> 75

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val  
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys  
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
50 55 60

<210> 76  
<211> 63  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
SP of HLA-E

<400> 76  
atggtagatg gaaccctcct ttactcctc tcggaggccc tggcccttac ccagacctgg 60  
gcg 63

<210> 77  
<211> 270  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence

# a1 domain

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<400> 77
ggctcccact ccttgaagta ttccacact gccgtgtccc ggcccggccg cggggagccc      60
cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc      120
gcgagtccga ggatggtgcc gcgggcgccg tggatggagc aggaggggtc agagtattgg      180
gaccgggaga cacggagcgc cagggaacac gcacagattt tccgagtga tctgcggacg      240
ctgcgcggct actacaatca gagcgaggcc      270

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<210> 78
<211> 276
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a2 domain

```

```

<400> 78
gggtctcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccacag gcgcttcctc      60
cgcggggatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg      120
cgctcctgga ccgcggtgga cagggcggct cagatctccg agcaaaagtg taatgatgcc      180
tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa      240
tacctggaga aggggaagga gacgctgctt cacctg      276

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<210> 79
<211> 276
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a3 domain

```

```

<400> 79
gagcccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg      60
tgctggggcc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag      120
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag      180
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag      240
catgaggggc taccgagacc cgtcacctg agatgg      276

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<210> 80  
 <211> 192  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain

<400> 80  
 aagccggcctt cccagcccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60  
 ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120  
 ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccaggg gtctgagtct 180  
 cacagcttgt aa 192

<210> 81  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Reformed SP

<400> 81

Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala  
 1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala  
 20

<210> 82  
 <211> 90  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 al domain

<400> 82

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ala Val Ser Arg Pro Gly  
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg  
35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr  
50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr  
65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
85 90

<210> 83

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 83

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp  
1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp  
20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr  
35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Cys Asn Asp Ala Ser Glu Ala Glu  
50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys  
65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu  
85 90

<210> 84  
 <211> 92  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a3 domain

<400> 84

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
 1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
 20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
 35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
 50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
 65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp  
 85 90

<210> 85  
 <211> 63  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain

<400> 85

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
 1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val  
 20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys

35

40

45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
 50 55 60

&lt;210&gt; 86

&lt;211&gt; 72

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Reformed SP

&lt;400&gt; 86

atggcgggtca tggcgccccg aaccctcgtc ctgctactct cgggggccct gaccctgacc 60

gagacctggg cg 72

&lt;210&gt; 87

&lt;211&gt; 270

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a1 domain

&lt;400&gt; 87

ggctcccact ccttgaagta tttccacact gccgtgtccc ggcccggccg cggggagccc 60

cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120

gcgagtccga ggatggtgcc gcgggcgccg tggatggagc aggaggggtc agagtattgg 180

gaccgggaga cacggagcgc cagggacacc gcacagattt tccgagtga tctgcggacg 240

ctgcgcggct actacaatca gagcgaggcc 270

&lt;210&gt; 88

&lt;211&gt; 276

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a2 domain

&lt;400&gt; 88

gggtctcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccagacag gcgcttcctc 60



cgcggggtatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg 120  
cgctcctgga ccgcggtgga cacggcggct cagatctccg agcaaaagtg taatgatgcc 180  
tctgagggcg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa 240  
tacctggaga aggggaagga gacgctgctt cacctg 276

<210> 89  
<211> 276  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 89  
gagcccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60  
tgctggggccc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag 120  
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag 180  
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240  
catgagggggc tacccgagcc cgtcaccctg agatgg 276

<210> 90  
<211> 192  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain

<400> 90  
aagccggcctt cccagcccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60  
ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120  
ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtct 180  
cacagcttgt aa 192

<210> 91  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic HLA leader peptide

<400> 91

Val Met Ala Pro Arg Thr Leu Val Leu  
1 5

<210> 92

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic HLA leader peptide

<400> 92

Val Met Ala Pro Arg Thr Leu Phe Leu  
1 5